FINDING OF NO SIGNIFICANT IMPACT

1.0 NAME OF THE ACTION

Resumption of use of depleted uranium (DU) rounds at Nellis Air Force Range (NAFR), Range 63 Target 63-10.

2.0 DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES

The 99th Air Base Wing (ABW), Nellis Air Force Base (AFB), Nevada, proposes to resume the employment of 30 millimeter (mm) DU rounds to fulfill a critical need for instructor training, testing and evaluation of associated tactics, and software development. This activity would be limited to Target 63-10 of the NAFR. This target area lies within a portion of the Desert National Wildlife Range (DNWR). Use of NAFR lands within the DNWR is outlined in a Memorandum of Understanding (MOU) between the United States Air Force (USAF) and the United States Fish and Wildlife Service (USFWS). Target 63-10 is the only remaining air-to-ground gunnery range in the United States, licensed for DU use.

Two alternatives to the Proposed Action were considered: (1) resume use, but at lessor quantities that are approximately 50 percent of the Proposed Action and, (2) No Action.

3.0 SUMMARY OF ENVIRONMENTAL EFFECTS

The activity would result in a total of 9,500 combat mix rounds (of which 7,900 are DU rounds) being expended annually on the target area. This would annually deposit approximately 2.37 metric tons of DU. The potential effects for each resource area are as follows:

Noise: Use of DU rounds on Target 63-10 would not generate noise levels above those already occurring during aircraft operations and firing of conventional munitions on this target area. The general public is prohibited access to the NAFR and would, therefore, be unaffected by noise generated within the restricted areas of the range.

Air Quality: Airborne emissions would consist primarily of fugitive dust and DU particulates. Particulates would settle quickly, resulting in minimal air migration. Resumed DU use would generate approximately 25 additional A/OA-10 aircraft missions annually to the target area, which would not significantly increase air emissions from these operations. The proposed action would not involve construction activities and would result in minor increases in vehicular traffic. The potential emissions from the proposed action would be minimal and not impact the current attainment status of the region. Because the NAFR is located in an unclassified area for all six National Ambient Air Quality Standards, a formal conformity determination is not required.

Water: Water studies conducted in the target area concluded that infiltration through the upper one foot of soil would not occur for approximately 100 to 200 years because of the limited precipitation. Since deep infiltration of water is not occurring, no mechanism for downward transport of uranium to the groundwater exists. Additionally, although the target area is located in a floodplain, the water study indicated that there is little migration

of the existing DU laterally due to surface water transport. Therefore, resumption of DU in the target area would have negligible groundwater and surface water impacts.

Safety and Occupational Health: Air migration of DU particulates are not likely to reach worker or populated areas, nor contain radiation at exposure levels that could affect workers or public health. Exposure to range personnel during target maintenance and clean-up activities would be limited, since personal protective equipment would be used as deemed necessary by Industrial Hygiene personnel.

Hazardous Materials and Waste: The Proposed Action would not change current procedures and practices for transporting, handling, and storing the DU rounds at Nellis AFB. DU fragments are normally concentrated within a 300 to 400 foot radius around the target, with small amounts of the materials extending 1,000 feet from the target. Monitoring and clean up of the target area would occur in accordance with the *DU Management Plan* and supplemental range procedures. The intact DU penetrators and visible large fragments would be removed from the surface area and stored at the holding area until removed for recycling or disposal. Wastes would be recycled or disposed of as low level radioactive waste in accordance with 10 CFR Part 20 requirements.

Biological: The low population and low absorption rate of animals at the target area make the possibility of ingestion minimal. The only federally protected animal species in the area is the threatened desert tortoise. No sightings of this species in the area have been recorded and the general habitat conditions for this species in the area are poor. Therefore, no significant impacts to biological resources are anticipated.

Cultural: There would be no effects on cultural resources, since proposed activities would be similar to ongoing operations and no new surface disturbance would occur.

Geology and Soils: Soil contamination levels in the immediate area of Target 63-10 would increase, but the areal extent of contamination would not change significantly.

Socioeconomics: The Proposed Action would not result in a change in personnel; the size, or location of any range; or the manner in which hazardous materials are handled. Therefore, no significant impacts on socioeconomics or environmental justice considerations would occur.

4.0 CONCLUSION

On the basis of the findings of the Environmental Assessment (EA), no significant impact is anticipated from the Proposed Action on human health or the natural environment. A Finding of No Significant Impact (FONSI) is warranted and an Environmental Impact Statement (EIS) is not required for this action.

Michael R. Patrick

MICHAEL R. PATRICK, Colonel, USAF
Chairperson, Headquarters Air Combat Command
Environmental Leadership Board

24 Sep 98

Date

EXECUTIVE SUMMARY

A wide spectrum of training capabilities exist on the Nellis Air Force Range (NAFR) to provide the most realistic combat training environment in the world. Many different types of ordnance, live and inert, are used on the NAFR to provide the training, tactics testing, and evaluation needed to achieve and maintain full combat readiness. One of the important capabilities of the NAFR has been the ability to test and train with depleted uranium (DU) munitions and weapons systems at Target 63-10 on Range 63.

This Environmental Assessment (EA) evaluates the impacts of implementing the Proposed Action or one of the two alternatives. The Proposed Action would be to resume the use of DU munitions for training and test/evaluation purposes. The alternatives evaluated are: Alternative 1, which includes the use of DU munition, but at lesser quantities; and the No Action Alternative, which continues the suspension of DU munition use.

The Proposed Action would allow the United States Air Force (USAF) Weapons School and the 422nd Test and Evaluation Squadron (TES) to resume DU munitions and weapons system training and test/evaluation activities at Target 63-10. These activities would result in a total of 9,500 combat mix rounds (7,900 DU rounds) being expended annually.

Under Alternative 1, the number of rounds that would be expended in support of training and test/evaluation activities would be reduced by approximately 50 percent. This critical reduction in rounds would not accomplish current mission requirements. If the reduced rounds to be expended were distributed, as appropriate, between the Weapons School and 422nd TES, minimal mission requirements would need to be redefined.

The No Action Alternative would continue the suspension of DU munition use for training and test/evaluation purposes. Training of pilots in the use of DU would rely on classroom instruction, which does not satisfy weapons system training requirements.

The existing conditions in the Range 63 target area are described in this EA. Resources addressed include noise, air quality, water, safety and occupational health, hazardous materials and waste, biological, cultural, geology and soils, and socioeconomics. The environmental consequences that may result from the implementation of the Proposed Action and the alternatives are also discussed in terms of these nine resources. The impacts to each resource from the Proposed Action and alternatives are briefly described below.

Noise: Implementation of the Proposed Action or alternatives would not generate noise levels above those already occurring during aircraft operations and firing of conventional munitions on this target area. The general public is prohibited access to the NAFR and would, therefore, be unaffected by noise generated within this target area.

Air Quality: Under the Proposed Action, airborne emissions would consist primarily of fugitive dust and DU particulates. The reduced use of DU under Alternative 1 would proportionately reduce the amount of DU particulates. U.S. Army studies at Yuma Proving Grounds (YPG), Arizona, on use of DU in an arid environment, demonstrate that the high density of DU

particulates does not make them a likely candidate for air migration. Under the No Action Alternative, air quality conditions would not differ from current conditions. The target area would continue to be unclassified, according to the National Ambient Air Quality Standards (NAAQS), in this portion of the Las Vegas Valley Air Quality Control Region (AQCR). A conformity determination is not required for the Proposed Action or alternatives, since they would be undertaken in an area that is unclassified with respect to NAAQS.

Water: There would be no effect on the groundwater as a result of implementing the Proposed Action, Alternative 1, or the No Action Alternative. Migration of additional DU via surface water would not be expected. Results of soil sampling and analysis indicate that existing DU in the target area is concentrated in a 300- to 400-foot circle around the targets, with a few isolated DU materials up to 1,000 feet past the targets. Soil sampling and analysis results show that surface water would not be affected and that DU would not be transported by surface water.

Safety and Occupational Health: Under the Proposed Action and Alternative 1, range maintenance personnel exposure would be limited during target maintenance and clean-up activities because personal protective equipment would be used, as deemed necessary by Industrial Hygiene personnel. Under the No Action Alternative, no adverse health effects are expected.

Hazardous Materials and Waste: Monitoring and clean up would be accomplished in accordance with the *DU Management Plan* under the Proposed Action and Alternative 1. DU would not be used at the NAFR under the No Action Alternative. Site clean-up and closure would be accomplished if the target area is no longer required for mission training requirements.

Biological: The primary potential source of DU impact to biology is through chemical toxicity. The low animal population numbers and low absorption rate of animals at Target 63-10 make the extent of chemical ingestion minimal under the Proposed Action or either of the two alternatives. DU already exists at the target site, so the No Action Alternative would still result in minimal exposure.

Cultural: Activities under the Proposed Action and Alternative 1 would be similar to ongoing operations on this target area, therefore, no new surface disturbance would occur. Thus, this proposal would not result in any effects on cultural resources.

Geology and Soils: Geology would not be impacted by the Proposed Action or Alternative 1. Soil contamination levels in the immediate area of Target 63-10 would increase, but the areal extent/depth of contamination would not change significantly under the Proposed Action and Alternative 1. There would be no change in impact to soils under the No Action Alternative.

Socioeconomics and Environmental Justice: Population, employment, and environmental justice considerations in the area would be unaffected by implementing the Proposed Action or either alternative.